

Amendments to the Claims

Please amend the claims according to the following directions. Please replace all prior versions and listings of claims in this application with the following list of claims:

1. (previously presented) A processing agent to transfer data of a predetermined data line length in an external transaction, the agent comprising an internal cache having a plurality of cache entries, each entry sized to store multiple data line lengths of data.
2. (previously presented) The processing agent of claim 1, wherein the cache entries include a tag portion adapted to store address information.
3. (previously presented) The processing agent of claim 2, wherein the internal cache further comprises
match detection logic for the tag portions, and
control logic provided in communication with the match detection logic.
4. (previously presented) The processing agent of claim 1, wherein the cache entries include a cache coherency state field in association with each data line length of data.
5. (previously presented) The agent of claim 1, further comprising a transaction queue having a plurality of queue entries, the queue entries including a primary entry adapted to store address information and status information of a first external transaction and a secondary entry adapted to store status information of a second external transaction.
6. (previously presented) The agent of claim 5, wherein the status information of the first external transaction includes a field representing whether the first external transaction is part of a multiple transaction sequence.
7. (previously presented) The agent of claim 5, wherein the total number of primary and secondary entries equals the multiple number of data line lengths provided in the cache entries.
- 8-10. (canceled).
11. (previously presented) A processing agent, comprising:

an internal cache having cache entries each sized to store multiple data lines, and
a transaction queue system to post external transactions, each external transaction related
to a single data line,

wherein the internal cache and the transaction queue system each receive data requests on
a common input.

12. (previously presented) The processing agent of claim 11, wherein the internal cache and
the transaction queue system communicate by signal lines.

13. (previously presented) The processing agent of claim 12, wherein the signals lines
include a cache hit signal line and a tag hit signal line.

14. (previously presented) The processing agent of claim 11, wherein the transaction queue
system comprises a plurality of queue entries, each queue entry comprising:

a primary entry including an address portion and status portion, the status portion
provided for a first external transaction of the agent, and

a secondary entry including a status portion provided for a second external transaction.

15. (previously presented) The transaction queue of claim 14, wherein the status portion of
the primary entry includes a field representing whether the first transaction is part of a multiple
transaction sequence.

16. (previously presented) The transaction queue of claim 14, further comprising control
logic adapted to cycle through the queue entries and post transactions therefrom.

17-24. (canceled).

25. (previously presented) The processing agent of claim 1, wherein “data line” refers to the
maximum amount of data that can be transferred in a single bus transaction.

26. (previously presented) The processing agent of claim 11, wherein “data line”
corresponds to the maximum amount of data that can be transferred in a single bus transaction.

27-29. (canceled).